AMENDMENT TO CLAIMS

1. (Original) An inactivated combination bovine rotavirus and coronavirus vaccine capable of inducing immunity in bovine animals without serious side effects, the vaccine comprising a vaccinal amount of a plurality of bovine rotavirus strains and at least one bovine coronavirus strain, and an adjuvant.

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2. (Original) The combination vaccine of claim 1, further comprising at least one vaccinal bacteria.

3. (Original) The combination vaccine of claim 1, wherein said rotavirus strains comprise Cody 81-4, G type10 B223 and B641.

4. (Original) The combination vaccine of claim 1, wherein said coronavirus strain comprises the Mebus strain having ATCC accession no. VR-874.

5. (Original) The combination vaccine of claim 1, wherein said rotavirus strains comprise Cody 81-4, G type10 B223 and B641 and the coronavirus strain comprises the Mebus strain having ATCC accession no. VR-874.

6. (Original) The combination vaccine of claim 2, wherein said vaccinal bacteria comprise a vaccinal amount of a plurality of *Escherichia coli* bacterin strains and at least one *Clostridium perfringens* Type C bacterin strain.

7. (Original) The combination vaccine of claim 5, further comprising at least one vaccinal bacteria.

8. (Original) The combination vaccine of claim 7, wherein said vaccinal bacteria comprise a vaccinal amount of a plurality of *Escherichia coli* bacterin strains and at least one *Clostridium perfringens* Type C bacterin strain.

9. (Original) The combination vaccine of claim 6, wherein said *Escherichia coli* bacterin strains comprise B41, B43, B44 and B141.

10. (Original) The combination vaccine of claim 8, wherein said *Escherichia coli* bacterin strains comprise B41, B43, B44 and B141.

11. (Currently amended) The combination vaccine of claim 6, wherein said *Clostridium perfringens* bacterin strain comprises GL47 having ATCC accession no. [[_____]]PTA-3000.

12. (Currently amended) The combination vaccine of claim 8, wherein said *Cl. perfringens* bacterin strain comprises GL47 having ATCC accession no. [[_____]]PTA-3000.

13. (Currently amended) The combination vaccine of claim 6, wherein said *Escherichia coli* bacterin strains comprise B41, B43, B44 and B141 and said *Clostridium perfringens* bacterin strain comprises GL47 having ATCC accession no. [[_____]]PTA-3000.

14. (Currently amended) The combination vaccine of claim 8, wherein said *Escherichia coli* bacterin strains comprise B41, B43, B44 and B141 and said *Clostridium perfringens* bacterin strain comprises GL47 having ATCC accession no. [[_____]]PTA-3000.

A1 cont'd

15. (Withdrawn) An inactivated combination vaccine capable of inducing immunity in bovine animals without serious side effect, the vaccine comprising a vaccinal amount of at least one bovine coronavirus strain and at least one vaccinal bacteria, said vaccinal bacteria comprising a vaccinal amount of a plurality of bacterin strains, and an adjuvant.

16. (Withdrawn) The combination vaccine of claim 15, wherein said coronavirus strain comprises the Mebus strain having ATCC accession no. VR-874.

17. (Withdrawn) The combination vaccine of claim 15, wherein said vaccinal bacterin comprises a vaccinal amount of a plurality of *Escherichia coli* bacterin strains and at least one *Cl. perfringens* Type C bacterin strain.

18. (Withdrawn) The combination vaccine of claim 17, wherein said coronavirus strain comprises the Mebus strain having ATCC accession no. VR-874.

19. (Withdrawn) The combination vaccine of claim 17, wherein said *Escherichia coli* bacterin strains comprise B41, B43, B44 and B141.

20. (Withdrawn) The combination vaccine of claim 17, wherein said *Clostridium perfringens* bacterin strain comprises GL47 having ATCC accession no. [[_____]]PTA-3000.

21. (Withdrawn) The combination vaccine of claim 17, wherein said *Escherichia coli* bacterin strains comprise B41 B43, B44 and B141 and said *Clostridium perfringens* bacteria strain comprises GL47 having ATCC accession no. [[_____]]PTA-3000.

22. (Currently amended) A method of vaccinating bovine animals comprising administering parenterally to said animals the combination vaccine of claim 1, 2, 5-8, ~~13-18 or 21~~13, or 14.

23. (Original) The method of claim 22, wherein the vaccine is administered by intramuscular injection.

24. (Original) The method of claim 22, wherein the vaccine is administered by subcutaneous injection.

25. (Original) A method of vaccinating bovine animals comprising administering parenterally to said animals an inactivated combination bovine rotavirus and bovine coronavirus vaccine capable of inducing immunity in bovine animals without serious side effect, the vaccine comprising a vaccinal amount of a plurality of bovine rotavirus strains and at least one bovine coronavirus strain, and an adjuvant.

26. (Original) The method of claim 25, further comprising at least one vaccinal bacteria.

27. (Original) The method of claim 26, wherein said vaccinal bacteria comprise a vaccinal amount of a plurality of *Escherichia coli* bacterin strains and at least one *Clostridium perfringens* Type C bacterin strain.

28. (Withdrawn) A method of vaccinating bovine animals comprising administering parenterally to said animals an inactivated combination vaccine capable of inducing immunity in bovine animals without serious side effect, the vaccine comprising a vaccinal amount of at least one bovine coronavirus strain and at least one vaccinal bacteria, said vaccinal bacteria comprising a vaccinal amount of a plurality of bacterin strains, and an adjuvant.

29. (Withdrawn) The method of claim 28, wherein said vaccinal bacteria comprise a vaccinal amount of a plurality of *Escherichia coli* bacterin strains and at least one *Clostridium perfringens* Type C bacterin strain.

30. (Original) The method of claim 25, wherein said rotavirus strains comprise Cody 81-4, G type 10B223 and B641.

31. (Original) The method of claim 25, wherein the coronavirus strain comprises the Mebus strain having ATCC accession no. VR-874.

32. (Original) The method of claim 25, wherein the rotavirus strains comprise Cody 81-4, G type 10B223 and B641 and the coronavirus strain comprises the Mebus strain having ATCC accession no. VR-874.

33. (Original) The method of claim 27, wherein the *Escherichia coli* bacterin strains comprise B41, B43, B44 and B141.

34. (Currently amended) The method of claim 27, wherein the *Clostridium perfringens* bacterin strain comprises GL47 having ATCC accession no. [[_____]]PTA-3000.

35. (Currently amended) The method of claim 27, wherein the *Escherichia coli* bacterin strains comprise B41, B43, B44 and B141 and the *Clostridium perfringens* bacterin strain comprises a GL47 having ATCC accession no. [[_____]]PTA-3000.

36. (Withdrawn) The method of Claim 29, wherein the coronavirus strain comprises the Mebus strain having ATCC accession no. VR-874.

37. (Withdrawn) The method of claim 29, wherein the *Escherichia coli* bacterin strains comprise B41, B43, B44 and B141.

38. (Withdrawn) The method of claim 29, wherein the *Clostridium perfringens* bacterin strain comprises GL47 having ATCC Accession No. [[_____]]PTA-3000.

39. (Withdrawn) The method of claim 29, wherein the coronavirus strain comprises the Mebus strain having ATCC accession no. VR-874, the *Escherichia coli* bacterin strains comprise B41, B43, B44 and B141 and the *Clostridium perfringens* bacterin strain comprises GL47 having ATCC accession no. [[_____]]PTA-3000.

40. (Currently amended) The method of claim [[25-29]]25-27, 32, or 35[[or 39]], wherein the vaccine is administered by intramuscular injection.

41. (Currently amended) The method of claim [[25-29]]25-27, 32, or 35[[or 39]], wherein the vaccine is administered by subcutaneous injection.

42. (Currently amended) The ~~inactivated scours~~combination vaccine of claim 1, 2, 5-8, ~~13-18, 21, 25-29~~13, 14, 25-27, 32[[,]]or 35[[or 39]], wherein the virus is inactivated with an inactivating agent selected from beta-propiolactone, formalin, ethyleneimine derivatives, UV radiation and heat.

43. (Original) The vaccine of claim 42, wherein said inactivating agent is beta-propiolactone.

44. (Currently amended) The ~~inactivated scours~~combination vaccine of claim[[s]] 1, 2, 5-8, ~~13-18, 21, 25-29~~13, 14, 25-27, 32[[,]]or 35[[or 39]], wherein the adjuvant is selected from oil based adjuvants, Freund's incomplete, alginate, aluminum hydroxide gel and potassium alum.

45. (Original) The vaccine of claim 44, wherein the adjuvant is an oil based adjuvant.

46. (Original) The vaccine of claim 42 or 44, wherein said inactivating agent comprises β-propiolactone and said adjuvant comprises an oil based adjuvant.

47. (Currently amended) A method of inducing scours immunity in neonatal bovine animals without serious side effect comprising the steps of administering the combination vaccine of

claims 1, 2, 5-8, ~~13-18, 21, 25-29~~13, 14, 25-27, 32[[,]]or 35[[or 39]] to pregnant cows prior to calving.

48. (Currently amended) The method of claim 47, further comprising administering a second dose of the combination vaccine of claims 1, 2, 5-8, ~~13-18, 21, 25-29~~13, 14, 25-27, 32[[,]]or 35[[or 39]] to pregnant cows prior to calving.